CURRENT MOUT DOCTRINE AND ITS ADEQUACY FOR TODAY'S ARMY

A thesis presented to the Faculty of the U. S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE

by

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Fort Leavenworth, Kansas
1997

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	6 June 1997	Master's Thesis, 4 August 1996 - 6 June 1997

4. TITLE AND SUBTITLE
Current MOUT Doctrine And Its Adequacy For Today's Army

5. FUNDING NUMBERS

6. AUTHOR(S)
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7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Army Command and General Staff College
ATTN: ATZL-SWD-GD
Fort Leavenworth, Kansas 66027-1352

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/ MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSORING/ MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/ AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited

12b. DISTRIBUTION CODE
A

13. ABSTRACT *(Maximum 200 words)*

This thesis examines the adequacy of current military operations on urbanized terrain (MOUT) doctrine for current and future Army operations at the battalion task force level. This study outlines Army MOUT doctrine's development including and since World War II and the current state of Army MOUT doctrine. This study applies four tests to determine the adequacy of MOUT doctrine: mission, threat, terrain and technology. Each test involves the general question of whether or not our current MOUT doctrine gives the task force commander the sufficient tools to conduct the range of operations he may execute today or in the near future. Additionally, the study uses two historical vignettes to as lessons learned and another means of testing MOUT doctine. This study concludes that current Army MOUT doctrine is inadequate for current and future operations. MOUT doctrine does not give the task force commander the tools he requires to conduct the missions, evaluate the threat, analyze the terrain, or use the technology available to him in an urban setting.

14. SUBJECT TERMS	15. NUMBER OF PAGES
Military Operations on Urbanized Terrain: MOUT; Urban Warfare; Doctrine	73
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED

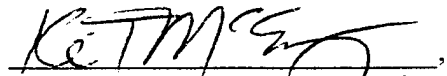
MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: MAJ Phillip T. Nethery

Thesis Title: Current MOUT Doctrine And Its Adequacy For Today's Army

Approved by: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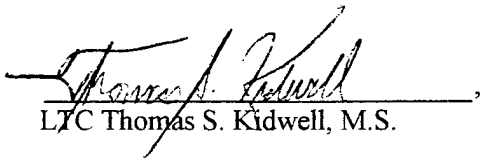
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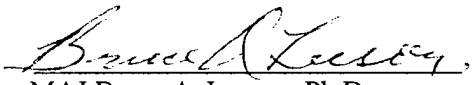
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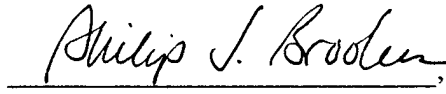
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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

CURRENT MOUT DOCTRINE AND ITS ADEQUACY FOR TODAY'S ARMY, by MAJ Phillip T. Nethery, USA, 71 pages.

This thesis examines the adequacy of current military operations on urbanized terrain (MOUT) doctrine for current and future Army operations at the battalion task force level. This study outlines Army MOUT doctrine's development including and since World War II and the current state of Army MOUT doctrine. This study applies four tests to determine the adequacy of MOUT doctrine: mission, threat, terrain and technology. Each test involves the general question of whether or not our current MOUT doctrine gives the task force commander the sufficient tools to conduct the range of operations he may execute today or in the near future. Additionally, the study uses two historical vignettes to as lessons learned and another means of testing MOUT doctine. This study concludes that current Army MOUT doctrine is inadequate for current and future operations. MOUT doctrine does not give the task force commander the tools he requires to conduct the missions, evaluate the threat, analyze the terrain, or use the technology available to him in an urban setting.

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CHAPTER 1

INTRODUCTION

Introduction

> The worst policy is to attack cities. Attack cities only when there is no alternative.
>
> Sun Tzu, The Art of War[1]

Sun Tzu summarized most modern soldiers' attitude toward urban combat. There is good reason for hesitance toward urban combat. Military operations on urbanized terrain (MOUT) are costly in terms of time, equipment, lives, and collateral damage. There is no guarantee of success and a small force in a city can hold a much larger force at bay for extended periods. Though most forces strive to avoid MOUT, each deployment or operation requires operations in urban areas to some degree.

United States Army doctrine is no different in addressing MOUT. "Tactical doctrine stresses that urban combat operations are conducted *only* when required and that built up areas are *isolated* and *bypassed* rather than risking a costly, time-consuming operation in this difficult environment."[2] Yet, Army forces conducted numerous MOUT operations in the recent past. Certainly, MOUT operations will be an integral part of future Army operations. Major Ralph Peters states that the "military unprepared for urban operations across a broad spectrum is unprepared for tomorrow."[3] The purpose of this study is to test the adequacy of current Army MOUT doctrine against recent, current, and future operations and to make recommendations based on the outcome of this test.

The Research Question

To meet the purpose of this study, this thesis will answer the following primary question: Is the Army's current MOUT doctrine adequate to meet current and future requirements?

In order to answer the primary question, this thesis will answer these secondary questions:

1. How does the current doctrine apply to military operations other than war (MOOTW)?

2. What have recent operations involving the United States or other countries shown about the adequacy of current American MOUT doctrine?

3. Is current MOUT doctrine adequate when compared to the range of environments encountered in recent, current, and future operations?

Background

Current Army MOUT outlines methods for fighting a singular threat in the European theater and is a continuation of the firepower based doctrine developed during World War I. One reason for questioning the adequacy of current MOUT doctrine is the age of the Army's doctrine manual on urban warfare, U.S. Army Field Manual 90-10, Military Operations on Urbanized Terrain (MOUT). The Army published this manual in 1979. Certainly, the age of a document does not automatically make it obsolete. With current technology and the world situation changing daily, however, it follows that a doctrine written almost twenty years ago requires examination. Additionally, the world's urban areas are growing rapidly. Communications and weapons technologies have changed several-fold since the late 1970s. Additionally, the United States no longer faces a unified threat in a European setting, but several diverse threats worldwide. The United States' involvement in

peacekeeping and other operations short of combat has increased greatly over the past five years as well. There are many compelling reasons for updating U.S. MOUT doctrine, but three are foremost: (1) the fall of the former Soviet Union, (2) lessons learned from recent operations in urbanized terrain, and (3) changes in U.S. military strategy and technology.

The world has changed in many ways since 1979. The most notable change in relation to U.S. military doctrine was the fall of the former Soviet Union. For forty years, U. S. strategy and military doctrine focused on the defense against and destruction of the Soviet Union and its allies. With that threat fragmented, the United States designed a military strategy that addressed the variety of threats the nation could face and operations it would likely conduct. There are still threats in the world, for example, Iraq that employ some form of Soviet doctrine. Others, like the factions found in Somalia, use other doctrines. Still others are not well-organized military threats at all, but require U.S. forces to operate in urban environments, such as during the assistance to victims of Hurricane Andrew or fighting terrorism. The Army's MOUT doctrine must adequately address each of these and other possibilities. Additionally, the MOUT doctrine must address operations in a wider range of environments and not restrict its treatment of terrain to a European setting.

Certainly, recent operations must yield ideas for updating the MOUT doctrine. Lessons learned from U.S. operations in Panama, Somalia, Haiti, and Bosnia all hold lessons that are applicable to future U.S. missions. The Army must incorporate these lessons into any revision of MOUT doctrine.

The President's A National Security Strategy of Engagement and Enlargement, developed after the end of the cold war, outlines the decision-making process behind the use of U.S. military forces. One category of the use of military forces is toward

humanitarian interests.[4] As the Army continues assisting in operations short of war and peacekeeping operations, and the operations continue to take place in settings like the streets of Port-au-Prince or Miami, it must have a MOUT doctrine that addresses these types of restrictive roles.

The Army can no longer restrict its MOUT doctrine to addressing a single Soviet threat fought in a European setting. MOUT doctrine must consider not only a range of potential threats, from conventional armies to terrorists, but also a range of environments, from the industrialized, advanced cities found in central Europe to the underdeveloped, primitive setting found in Mogadishu. Likewise, MOUT doctrine must also address levels of conflict ranging from peacekeeping and humanitarian operations where the rules of engagement are restrictive and consideration of the civilian population is of primary concern, to all-out combat where the civilian population has left the area of operations. This thesis will assess the adequacy of the current MOUT doctrine in light of these factors.

As much as the Army would like to avoid MOUT, it will conduct operations on urbanized terrain in future operations. The threat has expanded, the environment in which the Army plans to fight has changed, and the Army's role has expanded to include many forms of non-combat operations. Current MOUT doctrine must clearly and coherently address each of these issues.

Assumptions

The following assumptions are required in order to compete the research required for this study:

1. The operations used as a basis for this thesis are representative of the types of operations the Army will face in future operations and conflicts.

2. The adequacy of doctrine is measurable.

Definitions

The following are terms that are essential to this research study, arranged alphabetically:

Battlefield Operating Systems. The major functions performed by a force on the battlefield to successfully execute Army operations (battles and engagements) in order to accomplish military objectives directed by the operational commander; they include maneuver, fire support, air defense, command and control, intelligence, mobility and survivability, and combat service support.[5]

Built-Up Area. A concentration of structures, facilities, and population that form the economical and cultural focus for the surrounding area. The four categories include: large cities (population greater than 100,000), towns and small cities (population between 3,000 and 100,000), villages (population less than 3,000), and strip areas. Strip areas form links between villages and towns and run along lines of communication.[6]

Doctrine. Fundamental principles by which military forces guide their actions in support of national objectives. Doctrine is authoritative, but requires judgment in application. Doctrine must be rigid enough to provide steer specific operations and be flexible enough to apply to various situations.[7]

Hub Phenomenon. The hub of an urban pattern is the built-up area. For the defender, the hub may be a key part of his defense. The hub is an obstacle which blocks the attacker's advance. The hub or built-area may be bypassed if the surrounding terrain permits, opening the attacker to flank attacks. If the hub must be

attacked. MOUT operations must take place. The hub serves as the basis for urban patterns.[8]

Humanitarian Assistance. Assistance provided by DOD forces, as directed by appropriate authority, in the aftermath of natural or man-made disasters to help reduce conditions that present a serious threat to life and property. Assistance provided by U. S. forces is limited in scope and duration and is designed to supplement efforts of civilian authorities who have primary responsibility for providing such assistance.[9]

Intelligence Preparation of the Battlefield. A systematic and continuous process that describes the tactical environment and the effects of that environment on operations and what the enemy can accomplish.[10]

Linear Pattern. An urban pattern formed along straight lines, often a subelement of another pattern. It exists along valleys or rivers or connects other urban areas.[11]

Military Operations Other Than War (MOOTW or OOTW). Operations that encompass the use of military capabilities across the range of military operations short of war. These military actions can be applied to complement any combination of the other instruments of national power and occur before, during, and after war. [12]

Military Operations on Urbanized Terrain (MOUT). All military actions that are planned and conducted on a terrain complex where manmade construction impacts on the tactical operations available to the commander. [13]

Network Pattern. An urban pattern similar to the satellite but more extensive and complex. Often found in division or higher level sectors. Its satellites are far less dependent on the central hub than the satellite pattern. The network pattern's lines of communications have a rectangular shape rather than the linear shape found in the satellite pattern.[14]

Peacekeeping. Operations using military forces and/or civilian personnel, at the request of the parties to a dispute, to help supervise a cease-fire agreement and/or separate the parties.[15]

Pie Slice Pattern. Urban pattern characterized by the splitting of an urban area by dominant terrain features like rivers or roads so that the urban area resembles a sliced pie.[16]

Rules of Engagement (ROE). Directives issued by competent military authority that delineate the circumstances and limitations under which U. S. forces will initiate and/or continue combat engagement with other encountered forces.[17]

Satellite Pattern. This common urban pattern is characterized by a central hub and relatively dependent, dispersed, smaller built-up areas. It is usually found in brigade or division sectors and its lines of communications focus on the central hub. Its surrounding terrain is generally homogenous and its outlying satellites support the principal urban area.[18]

Tactics. The art and science of employing available means to win battles and engagements.[19]

Urban Terrain. Synonymous with built-up area.

War. A state of open and declared armed hostile conflict between political units such as states or nations; may be limited or general in nature.[20]

Limitations

The following factors are weaknesses associated with this study and are outside the researcher's control:

First is a lack of information about recent European operations. These operations may be too recent to yield a great deal of information. Additionally, the information on hand may be classified and thus difficult to attain or unavailable.

Second, because some operations were categorized as humanitarian or peacekeeping in nature and not actual combat, no information was gathered related to MOUT. U.S. peacekeeping operations in Bosnia are an example of this category of information.

Delimitations

The following factors constrain this study to assure its feasibility:

1. The study only examines conventional warfare. It does not include treatment of unconventional, special operations, or other types of operations the Army currently executes.

2. This thesis will use case studies of operations occurring within the past fifteen years. These operations will provide sufficient and comparable information for analysis while.

3. Finally, this study will examine the adequacy of MOUT doctrine at the battalion task force level and below.

Significance of the Study

Successful completion of this thesis will contribute to the Army in numerous ways. This study will serve as an assembly of research on modern MOUT actions. The historical vignettes include descriptions of the U.S. action in Somalia and the Russian urban fighting in Chechnya. Those desiring to study current MOUT operations and doctrine may use this as a starting point for their research. The extensive bibliography serves as a reference for those interested in MOUT. Next, the study will determine the

adequacy of current MOUT doctrine in relation to the missions facing the Army today. If this study finds that the doctrine is adequate, doctrine writers can solve more pertinent and relevant problems. If current MOUT doctrine is inadequate, this study will identify those inadequacies and make recommendations on the changes required to bring Army MOUT doctrine up to date. This thesis can significantly contribute to preparing the Army for current and future operations in urbanized terrain.

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[1]Sun Tzu, The Art of War trans. Samuel B. Griffith, (New York: Oxford University Press, 1963), 78.

[2]U. S. Army, Field Manual 90-10, Military Operations on Urbanized Terrain (MOUT), (Washington: Department of the Army, 1979), 1-2, 1-1.

[3]Ralph Peters, "Our Soldiers, Their Cities," Parameters (Spring 1996): 43.

[4]William J. Clinton, A National Security Strategy of Engagement and Enlargement (Washington, D.C.: GPO, 1996), 18.

[5]U.S. Army, Field Manual 100-5, Operations (Washington: Department of the Army, 1993), G1.

[6]U.S. Army, FM 90-10, 1-2, 1-3.

[7]U.S. Army, FM 100-5, G3.

[8]U.S. Army, FM 90-10, 1-6.

[9]U.S. Army, FM 100-5, G4.

[10]Ibid., G4.

[11]U.S. Army, FM 90-10, 1-8.

[12]The Joint Staff, Joint Publication 1-02, (Washington: OC, Inc., 1996), 265.

[13]U.S. Army, FM 90-10, i.

[14]Ibid., 1-7.

[15]U. S. Army, FM 100-5, G7.

[16]U. S. Army, FM 90-10, 1-8.

[17]U. S. Army, FM 100-5, G8.

[18]U. S. Army, FM 90-10, 1-7.

[19]U. S. Army, FM 100-5, G8.

[20]Ibid., G9.

CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter will serve three purposes. First, it will provide the reader with an overview of the state of current Army doctrinal literature relating to MOUT. Second, this chapter will give current Army MOUT doctrinal publications and give a limited overview of the evolution of MOUT doctrine since World War II. Finally, it will provide a synopsis of other publications discussing U.S. Army MOUT. These publications cover a wide variety of types and sources, ranging from journal articles to field manuals and The Army Times to the Department of the Army.

An abundance of sources provides a great deal of literature relating to Army MOUT doctrine. Additionally, many of these works are less than five years' old. This is mainly due to the renewed interest in MOUT doctrine within the military community. Recent lessons learned, the end of the cold war, and the increase in Operations Other Than War (OOTW) deployments involving the need to operate in urban areas without conducting combat operations caused this interest.

Doctrine

This portion of the study will examine current Army MOUT doctrine. To do so, the study will first briefly treat the evolution of MOUT doctrine since World War II, focusing on Field Manual 31-50, Combat in Fortified Areas. This treatment will discuss World War II MOUT doctrine, postwar doctrine and how this evolved into the

Army's current doctrine. Then, this section will examine the Army's key doctrinal publications, Field Manual 90-10, Military Operations on Urbanized Terrain (MOUT), and Field Manual 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas. Finally, this portion of this study will examine MOUT doctrine in the 71 series of field manuals, specifically FM 71-100, Division Operations; FM 71-3, The Armored and Mechanized Infantry Brigade; FM 71-2, The Tank and Mechanized Infantry Battalion Task Force; and FM 100-20, Military Operations in Low Intensity Conflict.

FM 31-50

The Army's doctrinal guide to MOUT during World War II was FM 31-50, Combat in Fortified Areas. Published for the first time in 1944, this manual outlined MOUT doctrine for use primarily during the war and also for periods after the war. The Army published this manual in anticipation of a great deal of urban combat associated with the invasion of Europe. Several points of the World War II version of FM 31-50 warrant examination for the purposes of this study.

FM 31-50, just like every other Army publication on MOUT doctrine, stresses bypassing built-up areas rather than fighting. Furthermore, the commander should only consider offensive operations as a last resort. The manual aptly pointed out that combat in urban areas gives the defender a decisive advantage, an advantage that the defender must weigh against the town's tactical value.[1]

As a result of the Army's reluctance to fight in urban areas during World War II, FM 31-50 orients almost entirely on how to conduct offensive operations. One must remember the offensive nature of American involvement in World War II. This nature drove FM 31-50's emphasis on the offense rather than the defense.

Fighting as a combined arms team in World War II was a relatively new concept. Though new, MOUT doctrine during that time reflected this combined arms approach. In offensive operations, FM 31-50 stressed fighting as a combined, synchronized force. Artillery and air support fired heavy preparatory fires into the built-up area, followed by the armor force encircling the town. Infantry troops, along with some armor then penetrated the defense and went from building to building to "mop up" any remaining resistance. The attacker used armor and infantry as a combined arms team.[2]

Army doctrine reflected the total war conditions experienced by the Army in World War II. The Army wrote FM 31-50 with those conditions in mind. The manual stressed using firepower to gain and advantage and thereby reduce or defeat the enemy. As a result, World War II MOUT doctrine did not consider collateral damage to city structures, the treatment of refugees and the civilian population, and the overall destruction resulting from such a doctrine.

Because of the offensive nature of World War II, MOUT doctrine in FM 31-50 gave very light treatment to defensive operations in built-up areas. It provided only a small amount of guidance on establishing a defense in a built-up area.

In summary, FM 31-50 is an offensively oriented publication, reflecting the fast paced, total war environment seen by the Army in World War II. It advocates bypassing built-up areas rather than expending resources, tying up forces and slowing down the tempo of the offensive. FM 31-50 bases its doctrine on using firepower and combined arms attacks to encircle the enemy, penetrate his defenses, and defeat him as quickly and decisively as possible.

FM 90-10

Army FM 90-10 is the first manual on MOUT doctrine since the 1964 version of FM 31-50. Published in 1979, FM 90-10 reflects the Army's experience during and since World War II, in the Korean and Vietnam conflicts, and other operations involving combat in urban areas.

Just as FM 31-50 reflected the combat environment facing the Army during and after World War II, FM 90-10 reflects the environment and conditions the Army anticipated during the cold war. One may examine these conditions by looking at the setting, threat, the intensity of conflict, and the doctrine described in FM 90-10.

The Army expected the next high intensity conflict to occur, like World War II, in Europe. Certainly, the Army anticipated and learned through its Korean and Vietnam experiences that there would be other threats in other locations, but Army doctrine after World War II focused on high intensity conflict in Europe. In classifying terrain and the types of urban areas expected in MOUT, FM 90-10 uses an entirely central European setting. FM 90-10 goes as far as to use German towns in its description and examples of urban environments.[3] It uses several means to describe terrain. The first is to classify the types of built-up areas, using Large Cities, Towns and Small Cities, Villages, and Strip Areas. It also describes the different patterns encountered in European cities and the effects of those patterns on operations.[4]

Though the settings described in FMs 31-50 and 90-10 remained the same, the threat changed after World War II. The United States' military strategy centered on defeating the forces of the Soviet Union and Warsaw Pact countries. As a result, the Army wrote all of its doctrine, including FM 90-10, directed toward the defeat of this threat. FM 90-10 gives detailed descriptions of the Soviet doctrine for MOUT in the offense and defense.

Since FM 90-10 assumed that the next war would be in Europe and with the Soviet Union, it followed that that conflict would be high intensity in nature. This meant that the Army continued the firepower-based MOUT doctrine outlined in FM 31-50. This doctrine maximizes the use of overwhelming firepower to defeat an enemy and gives little or no consideration to the effects of such doctrine on infrastructure or the civilian population.

FM 90-10 gives extensive coverage to Army MOUT doctrine, fully describing both offensive and defensive operations. Additionally, it covers combat support and service support operations and considerations in urban environments. First, a discussion of offensive operations.

The potential attacker's first and most important consideration in the offense is the tactical value of attacking versus bypassing the urban area. The attacker should always bypass when possible. FM 90-10 states that there are three purposes for attacks into built-up areas. Those purposes are to gain a critical objective, to rupture the defense, and to facilitate future operations.[5] FM 90-10 then divides offensive operations into two operations: hasty and deliberate attack. Of the two, the attacker only conducts a deliberate attack when it is absolutely necessary. A deliberate attack is very resource-intensive. It requires the attacker to devote a large amount of time, personnel, and resources to the planning and execution of the operation. Its potential for success is indirectly related to the amount of time taken to plan the operation; the enemy has additional time to prepare his defenses. Very similar to FM 31-50, FM 90-10 divides the deliberate attack into three phases: isolation of the objective, assault to rupture the defense, and systematic clearance of the urban area. The hasty attack provides the attacker the advantage of the ability to attack the defender before his defenses are fully established. Hasty attacks enable the attacker to find weak spots or

gaps, fix the enemy or exploit success.[6] FM 90-10 describes fully integrated, combined arms offensive operations.

Though FM 90-10 gives more consideration to defensive operations than its predecessors, most of the principles it describes are not unique to MOUT, but could be applied to any defensive operation. It divides its description of defensive doctrine into covering force, main battle, and rear area operations.[7] Like offensive operations, MOUT defense in FM 90-10 is a combined arms effort.

> If it is necessary to fight within a built-up area, the role of infantry supported by other arms becomes dominant. Field and air defense artillery, air cavalry, and attack helicopters are employed throughout the battle area to maximize the combined arms team's effectiveness, multiply its combat power, and enhance its survivability.[8]

FM 90-10 has several significant omissions. First, it does not address operations short of war. Written while the cold war was in full swing, FM 90-10's writers never envisioned the end of the Soviet Union and the subsequent involvement of the Army in numerous MOUT other than war. Second, FM 90-10 does not consider the range of terrain the Army currently faces. Its narrow scope only treats the European environment and fails to consider any other types of terrain or built-up areas. Finally, it does not address the technology available to today's Army. Specifically, the manual does not treat the use of the Bradley Fighting Vehicle, guided munitions, navigation, and communication equipment, and non-lethal weapons.

In summary, FM 90-10 established MOUT doctrine for the cold war Army. It describes urban combat in a European environment, with the Soviet Union in a high intensity conflict. Its doctrine advocates offensive operations only when absolutely necessary, using a combined arms team. It describes defensive doctrine in more detail than its predecessor, but does not offer much in defensive doctrine unique to MOUT. FM 90-10 omits several items now part of today's Army. Specifically, it omits

operations short of war, various terrain, and several technological innovations available for use.

FM 90-10-1

FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas, published in May 1993, is the companion manual to FM 90-10. It establishes in great detail how infantrymen are to conduct MOUT. While FM 90-10-1 is a 'how-to' manual in many ways, it not only implements doctrinal principles outlined in FM 90--10, but supplements FM 90-10 by establishing doctrine in areas where FM 90-10 does not. The Infantry School wrote FM 90-10-1 for infantrymen, while the Combined Arms Center at Fort Leavenworth wrote FM 90-10 for the entire Army. This section will examine what FM 90-10-1 includes and excludes.

FM 90-10-1 gives a varied analysis and description of a wide range of urban setting. Unlike FM 90-10, FM 90-10-1 does not restrict its discussion of urban terrain to a European setting. FM 90-10-1 gives a brief overview of the similarities and dissimilarities between urban areas found in different regions of the world, but this discussion does not address the specific types of construction and city layout found in each geographic region described in the manual.[9] The manual devotes an appendix to discussion of the various building types found in urban settings.

This manual gives a great deal of detail on the conduct of MOUT. It gives not only offensive and defensive operations, but further breaks those categories down from the battalion to the platoon level. Additionally, as the title implies, FM 90-10-1 gives detailed instruction on individual techniques on MOUT, ranging from individual movement techniques to camouflage.

Due to its recent publication, FM 90-10-1 integrates the use of most of the technology available today. It treats the use of the Bradley Fighting Vehicle in the offense and defensive operations. Additionally, it addresses the use of the Mark 19 and 120 millimeter tank gun.[10]

FM 90-10-1 devotes a chapter to urban analysis. This chapter gives a great deal of detail on terrain, weather, and threat analysis in MOUT. The terrain analysis covers types of construction for all regions of the world. FM 90-10-1 does not restrict its threat analysis to a "how they fight" analysis of one type of threat, but briefly covers a range of potential enemies, including insurgents, guerrillas, and terrorists.

This manual attempts to treat MOUT in low intensity situations in its Appendix G, "Military Operations in Urban Terrain Under Restrictive Conditions." This appendix covers restrictive rules of engagement in MOUT and conducts an analysis of MOUT in restrictive conditions as it relates to fire support, air defense, command and control, engineers, and intelligence.[11]

FM 90-10-1 is a well-written manual that covers a wide range of MOUT topics, many which are not covered in FM 90-10. It provides a basis for individual techniques for MOUT while also addressing unit doctrine up to the battalion task force level. And, though it discusses more technological, terrain, and threat issues than FM 90-10, it is still deficient in treating operations short of war, full threat evaluation and integration, the use of current technology, and terrain analysis.

71 Series of Field Manuals

This study examines three 71 series manuals: FM 71-100, Division Operations (1996); FM 71-3, The Armored and Mechanized Infantry Brigade (1996); and FM 71-

2, The Tank and Mechanized Infantry Battalion Task Force (1988). Of these three manuals, only FM 71-2 makes any mention of MOUT doctrine.

FM 71-2, published in 1988, has two short passages relating to MOUT doctrine. The first categorizes urban area operations as a special operating environment and is simply a one-paragraph summary of FM 90-10 tailored to use at battalion level.[12] FM 71-2's second mention of MOUT doctrine is in defensive operations. The offensive operations section does not mention MOUT. Like FM 90-10, most of the principles outlined in FM 71-2's treatment of MOUT in the defense apply to any defensive operation. Unlike FM 90-10, FM 71-2 gives some specific, but short techniques for employing tanks with Bradley Fighting Vehicles and tailors its limited comments to the battalion level.

FM 100-20

FM 100-20, Military Operations in Low Intensity Conflict, published jointly by the Army and Air Force in 1990 briefly treats urban area operations. This manual stresses the terrorist and insurgent threats and outlines the use of restrictive rules of engagement in order to minimize collateral damage and to garner the support of the local civilian population. It advocates the use of civil affairs and psychological operations teams as an integral part of success in low intensity MOUT.[13]

Student Products

This section of chapter two will examine the contribution to the study of MOUT doctrine to four Command and General Staff College products relating to MOUT. The scope of this examination will include three 1995 monographs and a Master of Military Art and Science (MMAS) thesis written in 1994. First, this study will consider the three monographs.

All three monographs are timely and examine MOUT from a current perspective. All three recommend that the Army stop avoiding MOUT and embrace the idea that MOUT is a fact of conducting most future operations. Given the idea that MOUT is an inevitability in future operations, each monograph makes specific conclusions relating to changing how the Army conducts MOUT. Each monograph makes interesting recommendations, but all are deficient in the depth of their recommendations. Specifically, none make recommendations on how to change MOUT in relations to the use of technology, different threats, or in operations short of war.

"MOUT Art Operational Planning Considerations for MOUT" by Major Charles A. Preysler, outlines several key points. First, the Army must accept urban combat in the future as inevitable and plan accordingly. Second, in planning, leaders must understand the urban environment and the tension created between destruction, cost, and duration. Third, planners must focus on operational objectives in order to ensure timely success. Fourth and finally, he determines that current MOUT doctrine is insufficient and inadequate because of its age. He recommends a full revision of FM 90-10 "to bring it in line with current U.S. doctrine." Major Preysler's recommendations focus on adding operational planning considerations to MOUT doctrine, including differing terrain, threat, and leveraging modern technology in warfare.[14]

Major Richard M. Francey, Jr., wrote "The Urban Anatomy: The Fundamentals of a City." Major Francey contends that current MOUT doctrine is not adequate for future operations based on two main reasons. The first reason is that the doctrine's focus in incorrect. The Army's MOUT doctrine, as found in FM 90-10 is too tactically oriented and the Army should revise it to give it a more operational focus. Major

Francey also states the Army's MOUT doctrine should change its terrain focus from a European one to a more broad range of terrain. He recommends that MOUT doctrine be revised to reflect an operational perspective, discuss the aspects of normalcy and legitimacy during MOUT, and should examine the MOUT environment as a system rather than simply terrain.

"Future Combat in Urban Terrain: Is FM 90-10 Still Relevant?" by Major Steve P. Goligowski concludes that MOUT training is of utmost importance to success in MOUT. Second, he concludes that current MOUT doctrine is insufficient and requires change. Specifically, Major Goligowski recommends that Army leaders embrace MOUT as inevitable in future operations. Following that understanding, he contends that Army leaders should update MOUT doctrine, but he gives no specific recommendations for changes. Next, the Army should train MOUT, reflecting the new doctrine in the Training and Doctrine Command (TRADOC) schools system. Finally, with new MOUT doctrine in place and TRADOC teaching soldiers the new doctrine, the Army should examine current organizational structures and weapons systems to ensure it has the right organizations and weapons to meet MOUT challenges.

"Sufficiency of Doctrine for the Use of Armor in Military Operations on Urban Terrain" by Major David B. Hain is a MMAS thesis. Major Hain also concludes that current MOUT doctrine is inadequate for the proper use of armor in an urban environment. Major Hain conclusions result from the fact that Army MOUT doctrine does not provide the armor platoon, company, or battalion commander implementing doctrine to participate in all of operations a unit might conduct in an urban environment.[15]

Periodicals and Books

Numerous periodicals and books discuss MOUT. The periodicals discuss mainly two areas: lessons learned about MOUT and the application of those lessons, and analyses of battles involving MOUT. All periodical works agree that current MOUT doctrine is inadequate and requires changing. The books treating MOUT fit into two broad categories: analyses of battles involving MOUT or MOUT as it relates to a specific aspect, like terrain. The books relating to MOUT make no specific recommendations regarding current Army MOUT doctrine.

Summary

This chapter provided the reader with an overview of the state of current Army doctrinal literature relating to MOUT. To do so, this chapter familiarized the reader with current Army MOUT doctrinal publications, and gave the reader an overview of the evolution of MOUT doctrine since World War II, and finally, provided a synopsis of other publications treating U.S. Army MOUT doctrine.

FM 31-50 was the Army's first attempt at establishing MOUT doctrine. It contained an offensively orientated doctrine, written to meet the needs of the Army in World War II. FM 91-10, the Army

' current MOUT manual grew from the Army's World War II, Korea, and Vietnam experience to enable the Army to fight and win against the Soviets in Europe. FM 90-10-1 complements FM 90-10 as a 'how to' MOUT manual and also provides doctrine in areas where FM 90-10 is deficient. Both manuals are relatively old and only provide firepower-based solutions for the commander. Most popular and current works agree that the Army's current MOUT doctrine is deficient and requires updating.

[1]U.S. Army, Field Manual 31-50, Combat in Fortified and Built Up Areas (Washington: Department of the Army, 1944): 77.

[2]Ibid., 79.

[3]U.S. Army, Field Manual 90-10, Military Operations on Urbanized Terrain (MOUT) (Washington: Department of the Army, 1979), 1-2.

[4]Ibid., 1-2-1-9.

[5]Ibid., 2-8.

[6]Ibid., 2-13-2-14.

[7]Ibid., 3-18.

[8]Ibid., 3-15.

[9]Ibid., 2-1.

[10]Ibid., B-1.

[11]Ibid., G1.

[12]U.S. Army, Field Manual 71-2, The Tank and Mechanized Infantry Battalion Task Force (Washington: Department of the Army, 1988): 1-14.

[13]U.S. Army, Field Manual 100-20, Military Operations in Low Intensity Conflict (Washington: Department of the Army, 1990): E9.

[14]Charles A. Preysler, "MOUT Art: Operational Planning Considerations for MOUT (SAMS Monograph, U.S. Army Command and General Staff College, 1994): 44.

[15]David A. Hain, "Sufficiency of Doctrine for the use of Armor in Military Operations on Urban Terrain" (MMAS Thesis, U.S. Army Command and General Staff College, 1994), 111.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

This chapter will outline the methodology used to answer the primary research question: Is the Army's current MOUT doctrine adequate to meet current and future requirements? To answer the primary question, this study will determine the presence and evaluate the adequacy of present Army MOUT doctrine. This study will restrict tests for the adequacy of MOUT doctrine to the manuals available and pertinent to the battalion task force commander for use in MOUT operations. This study includes the following manuals for analysis: FM 90-10, Military Operations on Urbanized Terrain (MOUT); FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas; FM 71-3, The Armored and Mechanized Infantry Brigade; and FM 71-2, The Tank and Mechanized Infantry Battalion Task Force.

A researcher may use numerous military systems as valid analytical tools to examine doctrine or other military questions. Those systems include the battlefield operating systems, tenets of Army operations, and the principles of war. This study uses a variation of the leaders' mission, enemy, troops, terrain and weather, and time available or METT-T analysis as a tool to evaluate the adequacy of MOUT doctrine. The four tools used by this study are mission, threat, terrain, and technology. These tools resemble the METT-T analysis, while allowing tailoring to reflect the situation in the Army today.

Mission

FM 101-5-1 describes mission as "the primary task assigned to an individual, unit, or force. It usually contains the elements of who, what, when, where, and the reason, but seldom specifies how."[1] Tacticians often interest themselves specifically in the what or task and the why or purpose in relation to warfighting. This study examines the what or task to be performed by the combat unit in MOUT.

This tool allows us to evaluate doctrine for adequacy across the range of missions a unit might conduct in an urban environment. It includes mission involving combat operations and operations other than war.

Two sources contribute the specific components of this tool. Those components are FM 100-15, Corps Operations and FM 71-2, The Tank and Mechanized Infantry Battalion. FM 100-15 might not seem like a suitable choice for this test, but this manual contains the missions a unit might conduct in an operation other than war. Those missions are: arms control, attacks and raids, combatting terrorism, disaster relief, nation assistance and support to counterinsurgency, peace operations, show of force, support to civil authorities, and support to counterdrug operations.[2] Certainly, no battalion task force would execute any of these missions alone, but could easily be expected to participate as a part of a corps, division, or other force in one or many of these operations other than war.

FM 71-2 contributes the combat operations for the mission analytical tool. The offensive operations are hasty attack, deliberate attack, and attack of a strongpoint. The defensive operations are defense of a sector, defense of a battle position, and defense of a strongpoint.

The minimum criteria for the mission area analysis is the presence of an applicable MOUT doctrine for the missions listed above. If the publications do not contain MOUT doctrine for all of the missions listed, then the doctrine is inadequate.

Threat

The METT-T model uses the enemy label to account for the opposing force in a military operation. The term enemy refers to "a hostile power or force, such as a nation."[3] This definition is too restrictive. It suggests that another force must be a nation or represent some legitimate body such as a goverment in order to be a hostile force. Threat, or "one that is regarded as a possible danger, menace" is far more suitable in describing the forces that the Army faces in modern operations. This definition covers a hostile power or force in the form of a nation, while also describing less organized, less legitimate opponents. Some argue that soldiers' use of threat makes the range of possible opponents far too broad to manage. This definition simply reflects diversity of the forces and opponents facing the United States today.

This study will use threat as a tool to evaluate the adequacy of MOUT doctrine by addressing the following question: Does Army MOUT doctrine assist the commander in identifying all of the potential dangers or menaces facing his force?

The minimum criteria for adequacy of MOUT threat doctrine is the presence of doctrine for both conventional and unconventional threats. A conventional threat refers to a force sponsored and fielded by a constituted political unit like a state or nation.[4] Unconventional threat consists of two subsets: insurgents and terrorists. An insurgent threat is an organized group aimed at the overthrow of a constituted government using subversion and armed conflict.[5] A terrorist threat uses unlawful threats or the actual use of force against people or property to coerce, intimidate

governments or societies to achieve political, religious, or ideological objectives. Terrorists may be nonstate supported, state supported or state directed.[6]

Terrain

FM 101-5-1 defines terrain, including weather, as "information about how about vegetation, soil type, hydrology, climatic conditions, and light data is analyzed to determine the impact the environment can have on current and future operations for both enemy and friendly operations."[7] Additionally, soldiers use the military aspects of terrain, like observation, cover, obstacles, concealment, key terrain, and avenues of approach to analyze terrain. Too often soldiers use these tools, useful in a rural environment, to evaluate an urban environment. This application is valuable, but in combat and operations other than war, the commander often requires a deeper understanding of the urban environment. This understanding must include the social, economical, and political value or lack of value of an objective. This study seeks to broaden the definition of terrain to support the mission or specifically, the purpose, for which the unit is conducting the operation on urban terrain. It will do so by applying the following question: Does Army MOUT doctrine provide the commander a means to identify the tactical or operational significance of the objective?

The minimum criteria for this test covers two areas. First, whether or not MOUT doctrine gives the commander the ability to do the traditional terrain analysis-observation, cover and concealment, obstacles, key terrain, and avenues of approach (OCOKA). Second, whether or not MOUT doctrine give the commander the ability to understand key systems within the urban environment and their operational value to the him and the threat. Those systems are utilities, communications, transportation, waste management, civil order, and government.

Technology

Technology or the application of science to commercial[8] or in this case military objectives changes daily. The United States Army has some of the most advanced technology in the world. With the openess of today's global markets, many threats have the same or similar technology available to them. This is more true in the areas of communications, the media, computers, and navigation than in weapons and vehicle systems. Commonly available communications systems such as cell phones significantly change both the commander's ability to communicate and contribute to an information advantage. Global innovations and the availability of the Internet give everyone but the poorest access to a great deal of information. Guided munitions, along with the global, instant reach of the media combined to give the public the perception of the cleanliness of combat. Given the great potential for casualties in an urban setting, friendly or threat units may use this instant and close-up view of the fighting to his advantage. The MOUT commander must gain an understanding and ability to use these systems as effectively as he might a rifle platoon or company, especially in operations short of war. Because of the importance to success in any operation, especially MOUT, this study uses technology as one of its evaluative tools in examining MOUT doctrine. It does so by answering the following question in relation to the Army's MOUT doctrine: Does the MOUT doctrine give the commander the means to employ the weapons technology and use the information systems available to him while countering the technology available to his opponent?

The minimum criteria for adequacy in evaluating the doctrinal treatment of the use of technology covers two areas. First, whether or not MOUT doctrine allows the commander to apply a firepower based solution to the mission he must conduct.

Second, is whether or not MOUT doctrine gives the commander the ability to apply non firepower based solutions to a situation.

This study will compare the MOUT doctrine explained in the field manuals listed above to the four analytical tools and their components. The resulting comparison will indicate the adequacy of current MOUT doctrine and provide results on which conclusions can be drawn and recommendations made about the MOUT doctrine.

The second tool used in this thesis' methodology is the use of historical vignettes of MOUT battles. The battles in Chechnya and Mogadishu serve several valuable purposes. First, in addition to their presentation of the facts of a MOUT battle, this study will analyze each the lessons learned from the battle. The purpose of that analysis is to assist the reader in evaluating the status of MOUT doctrine. Additionally, historical vignettes provide the reader with a broader perspective of military operations than might otherwise be gained through a doctrinal review. Next, the majority of Army doctrine, tactics, techniques, and procedures is developed from a similar process. Finally, this study will analyze each battle using mission, threat, terrain and technology. Those responsible for a particular area start with an existing document, like FM 90-10. They then use accumulated experiences to update and make changes to that document. Finally, this study will analyze the historical vignettes against the mission, threat, terrain and technology tools to provide additional basis for conclusions and recommendations.

Strengths and Weaknesses

This study's analytical process has several inherent strengths. The first strength is consistency. The researcher may apply this process across a range of types of

operations as well as at different levels of warfare, from the platoon to the Army level. Validity is this process' second strength. The study's process of examination of military history is widely accepted and used by the military community to examine the adequacy of doctrine.[9] Additionally, recent experiences indicate that urban operations will not be incidental, but an integral part of military operations as the world continues to urbanize and the Army continues its force projection stance. The results of these tests yield sound results. Next, the study's tools are acceptable and familiar to the military community. Furthermore, the tools are integral parts of the military decision-making process and a part of each military operation. Finally, the tools used in this process are rigorous. The scope of the test is broad enough to yield well-founded results, but at the same time, not too cumbersome.

The main weakness associated with this type of analytical tool is the potential difficulty in measuring some of the individual tools. If MOUT doctrine addresses the majority of the offensive operations conducted by a battalion task force in urban terrain, then the doctrine is adequate. In this study, MOUT doctrine must meet the minimum standards established for each of the analytical tools, otherwise it is inadequate. These tools represent the pertinent issues facing the Army and are all essential for success in an urban environment, operating throughout the spectrum of conflict, including operations other than war.

Conclusions may be drawn from this analytical process. Foremost, the process discusses the adequacy of MOUT doctrine when compared to the current military environment, outlined using mission, threat, terrain, and technology. From this test of adequacy, the strengths and deficiencies in current MOUT doctrine may be identified. Recommendations may be made from the strengths and weaknesses on the actions

required to maintain the strengths of the current doctrine, while correcting the problems with Army MOUT doctrine. The historical case studies may be used to derive lessons learned from various MOUT operations, covering a range of missions, threats, terrain, and use of technology.

Summary

Many options are available in selecting analytical tools to evaluate Army doctrine. This study will evaluate Army MOUT doctrine using a variation of the soldiers' METT-T analysis. That variation includes the use of mission, threat, terrain, and technology as categories. The study will also evaluate two recent MOUT cases against the mission, threat, terrain, and technology model. The resulting analysis will allow the researcher to draw conclusions and then make recommendations relating to current MOUT doctrine. Though there are potential weaknesses associated with using this type of analytical analysis, the weaknesses do not threaten the integrity or validity of the analysis.

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[1]U. S. Army, FM 101-5-1, Operational Terms and Symbols (Washington: Department of the Army, 1985), 1-47.

[2]U.S. Army, FM 100-15, Corps Operations (Washington: Department of the Army, 1996), 9-5.

[3]The American Heritage Dictionary, rev. ed. (1992) s.v. "enemy."

[4]U.S. Army, FM 100-5, Operations (Washington: Department of the Army, 1993), G-9.

[5]U.S. Army, FM 100-20, Military Operations in Low Intensity Conflict (Washington: Department of the Army, 1990), G4.

[6]Ibid., 3-1.

[7]U.S. Army, FM 101-5-1, Operational Terms and Symbols (Washington: Department of the Army, 1985), 1-47.

[8]The American Heritage Dictionary, rev. ed. (1992) s.v. "technology."

[9]U.S. Army, Pamphlet 20-200, The Writing of American Military History (Washington: Department of the Army, 1956), 11.

CHAPTER 4

ANALYSIS

Introduction

This chapter will present, analyze and interpret the information produced by the methodology outlined in Chapter 3. It will provide the information to answer the primary question: Is the Army's current MOUT doctrine adequate to meet current and future requirements? This study will examine two brief historical vignettes and then analyze the current MOUT doctrine based on the criteria of mission, threat, terrain and technology. To accomplish this analysis, the study divides the analysis into two sections.

Section I analyzes current MOUT doctrine as offered in the following Army publications: FM 90-10, Military Operations on Urbanized Terrain (MOUT); FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas; FM 71-3, The Armored and Mechanized Infantry Brigade; and FM 71-2, The Tank and Mechanized Infantry Battalion Task Force. The study conducts this analysis using the tools outlined in Chapter 3. It compares the doctrine found in the manuals listed above against the tools listed in Chapter 3. Those tools include an analysis of potential missions a battalion might conduct in an urban setting, an examination of the doctrinal treatment of the various threats a battalion might face, an examination of what tools the doctrine gives the commander and his staff to analyze urban terrain, and finally, a review of the use of available modern technology in MOUT fighting.

The second section examines two historical vignettes and how they relate to current MOUT doctrine. Both vignettes are valuable because they offer a range of missions covering a variety of terrain and varying situations. Additionally, the study will examine each case in relation to the mission, threat, terrain and technology model. The vignettes include and examination of the Russian MOUT fighting in Chechnya in 1994 and the United States Army urban operation in Mogadishu, Somalia in 1993.

These historical vignettes provide the reader with insight about the realities of urban combat in the 1990s. Russian fighting in Grozny is pertinent because it shows, among other lessons, the effect of a firepower-based doctrine applied in to a modern, European-style environment. American fighting in Mogadishu holds several lessons for the MOUT student. Foremost, the potential for disaster in an operation short of war with limited rules of engagement and an unconventional enemy bent on defeating a force.

Doctrinal Analysis

Mission

This section will compare Army MOUT doctrine and its treatment of the various missions possibly facing a battalion task force in current and future urban operations. Though a battalion task force might not conduct all of these missions as an autonomous entity, the battalion fully be expected to participate in all of these missions as a part of a larger force.

Offensive Operations

The missions included in the analysis of doctrine for offensive operations include: hasty attack, deliberate attack, attack of a strongpoint, and attacks and raids.

This study will compare each of these missions to the doctrine outlined in the following manuals.

FM 90-10, Military Operations on Urbanized Terrain (MOUT)

FM 90-10 gives an excellent overview of offensive operations at the battalion task force level. It does so through the use of three special situations describing three different offensive operations.

The first special situation describes the battalion task force conducting a hasty attack of an urban area. The situation describes the operation using the commander's narrative of how he expects to fight the battle. The situation covers the concept of the operation and describes the use of all of the battlefield operating systems and their role in the hasty attack. The situation stresses command and control, especially the control measures used in the attack.

FM 90-10's second special situation describes attacking to gain a foothold. Though the manual does not specifically refer to it as a deliberate attack, this operation resembles a deliberate attack. Like the first special situation, this situation describes the commander's actions, the actions of the specific battlefield operating systems, and the control measured used in the operation.

FM 90-10 does not address the doctrine supporting a battalion task force's attack of a strongpoint or attacks and raids in an urban environment. A task force can expect to conduct each of these operations in an urban environment.

FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas

FM 90-10-1 devotes a little more than a paragraph to the conduct of a hasty attack in an urban area. Its coverage does not give the commander the tools he needs to conduct the operation.

FM 90-10-1 addresses the deliberate attack in more detail than the hasty attack. It covers the steps involved in the operation, including reconnoiter of the objective, movement to the objective, securing a foothold, and clearance of a built up area.

This manual does not specifically address the attack of a strongpoint, or urban attacks and raids. It does, however, treat how a company team might attack an enemy outpost and key terrain as a part of a battalion task force.

FM 71-3, The Armored and Mechanized Infantry Brigade

Though this manual covers offensive operations at the brigade level, it does does not mention offensive operations on urbanized terrain. Furthermore, it does not give any information on urban combat of any type.

FM 71-2, The Tank and Mechanized Infantry Battalion Task Force

FM 71-2 does not address hasty or deliberate attacks, attack on a strongpoint, or attacks and raids in urban environments. Its treatment of operations on urban terrain are limited to generalities about the conditions in urban settings. FM 71-2 refers the reader to FM 90-10 for guidance on operations in urban terrain.

Defensive Operations

The missions included in the analysis of doctrine for defensive operations are defense of a sector, defense of a battle position, and defense of a strongpoint. A

battalion task force may conduct these missions independently, or as a part of a larger force.

FM 90-10, Military Operations on Urbanized Terrain (MOUT)

FM 90-10's means of discussing defensive operations at the task force level uses one situation. Though the manual refers to it as a defense of a battle area, it is nothing more than the defense of a battle position. It outlines the defense of a battle position by using the commander's spoken guidance as to how he intends to conduct the defense. Similar to its coverage of offensive operations, the manual's description of defense of a battle position stresses the employment of the battlefield operating systems, command and control, the concept of the operation, and control measures used in this type of defense. FM 90-10 does not address the urban defense of a sector or strongpoint.

FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas

This manual devotes four pages to defensive operations at the battalion task force level. It covers defense in sector. FM 90-10-1's treatment of defense in sector covers the employment of forces in the sector, maneuver, control measures, fire support and mobility and countermobility. It does not cover these topics in depth and neglects the other battlefield operating systems entirely.

FM 90-10-1 does not specifically cover defense of a battle position or defense of a strongpoint. The manual does, however, treat the defense of a village in a manner closely resembling that of a strongpoint. It goes so far as to state that the battalion with a village in their sector could "incorporate the village as a strongpoint in its

defense."[1] The manual's discussion of defense of a village is short, covering employment of major weapon systems, security, and mobility/countermobility.

FM 71-3, The Armored and Mechanized Infantry Brigade

Though this manual covers defensive operations at the brigade level, it does does not mention defensive operations on urbanized terrain. Furthermore, it does not give any information on urban combat of any type.

FM 71-2, The Tank and Mechanized Infantry Battalion Task Force

This manual devotes two pages to battalion task force defensive operations in urban terrain, one of which is a diagram depicting a typical task force sector defense. The manual covers general topics like the amount of terrain a task force will defend, the types of maneuver a task force uses in an urban defense, employment of major weapon systems, and effects of terrain on friendly and enemy courses of action.

Military Operations Other than War

The missions included in the analysis of doctrine for military operations other than war are combatting terrorism, disaster relief, nation assistance, support to counterinsurgency, peace operations, show of force, support to civil authorities, and support to counterdrug operations.

FM 90-10, Military Operations on Urbanized Terrain (MOUT)

FM 90-10 only covers one area related to MOOTW. This manual gives a general overview of civil affairs operations. Civil affairs operations, in the context of FM 90-10, relates to what the Army would call nation assistance today. Its coverage of civil affairs operations is short and general in nature and does not address any of

the peculiarities of civil affairs operations in urban environments, but gives an overview of how on the principles of civil affairs operations.

FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas

This manual does not specifically address any of the MOOTW missions outlined above. However, it does contain a section treating the conduct of MOUT under restrictive conditions. Though not doctrine on the specific missions a task force might encounter in a MOOTW setting, this section addresses issues of restrictive rules of engagement and the use of force in operations other than war.

FM 71-3, The Armored and Mechanized Infantry Brigade

This manual has a section addressing brigade level MOOTW operations, including those listed above. It treats the brigade's conduct of each mission in detail. It does not, however, cover MOOTW operations in an urban setting.

FM 71-2, The Tank and Mechanized Infantry Battalion Task Force

FM 71-2 does not cover missions relating to operations other than war in any way. Furthermore, it does not have sections covering topics that relate to MOOTW or their execution in an urban setting.

Army MOUT doctrine is inadequate in providing doctrine for the missions a battalion task force commander can expect to execute. In offensive operations, it does not adequately address the attack of a strongpoint or or raids in MOUT. In defensive operations, it does not cover sector defense or the defense of a strongpoint. MOUT doctrine excludes several operations other than war, including combatting terrorism, disaster relief, nation assistance, support to counterinsurgency, peace operations, show of force, support to civil authorities, and support to counterdrug operations. Current

Army MOUT doctrine does not give the commander the tools he requires to execute the missions he is likely to encounter.

Threat

This section addresses Army MOUT doctrine found in the following four manuals and seeks an answer to the following question: Does the MOUT doctrine assist the MOUT commander in identifying all of the potential dangers or menaces facing his force?

FM 90-10, Military Operations on Urbanized Terrain (MOUT)

The only reference in this manual to potential threats is in its offensive and defensive sections covering how the enemy defends and how the enemy attacks. In each case, the only enemy or threat to which the manual refers is the coldwar-era Soviet Union force. This force employs Soviet doctrine, using Soviet weapon systems.

FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas

This manual refers to the threat and threat analysis in two areas. The first section is very short and mentions that the Army can no longer count on facing a singular, Soviet threat in current and future MOUT. The second area one finds reference to a threat is in Chapter 2, Section III, Threat Evaluation and Integration.

The Threat Evaluation and Integration section of FM 90-10-1 gives the commander a useful tool in establishing the nature of his threat. It covers the range of potential threat, from a conventional force to guerrillas and terrorists. It covers the potential actions of conventional forces and gives the commander an overview of the potential actions of insurgents, guerrillas, and terrorists in an urban environment.

Additionally, it covers several of the social, political, cultural, and economic factors shaping a threat's actions.

FM 71-3, The Armored and Mechanized Infantry Brigade

This manual briefly states that the Army can no longer anticipate facing a single, monolithic, well-defined threat. It states that American forces can count on facing a range of forces, from major regional powers to terrorist groups. These threats are more diverse and less predictable than the Soviet threat of the coldwar. This fact forces us to conduct a rigorous and continuous intelligence preparation of the battlefield.[2]

FM 71-2, The Tank and Mechanized Infantry Battalion Task Force

Similar to FM 90-10, FM 71-2 describes threat doctrine by addressing how the Soviets defend and attack. In this case, the manual refers to the coldwar Soviet Union. It does not address how he conducts these operations in an urban environment.

This manual also addresses threat actions in its section discussing the task force level IPB process. This discussion, like the other sections, refers to a singular Soviet-style threat and no others.

The doctrinal treatment of the threat is adequate. FM 90-10-1 gives the commander the basic tools he requires to evaluate both conventional and unconventional threats.

Terrain

This section seeks to answer whether or not Army MOUT doctrine provides the MOUT commander a means to identify the tactical or operational significance of the objective? This section's answer to this question is more in keeping with the idea of

initiative based warfare and giving the commander the freedom to think and act, rather than acting out of habit or repetition.

FM 90-10, Military Operations on Urbanized Terrain (MOUT)

This manual devotes an entire appendix to the treatment of urban terrain analysis. It covers in great detail the types of terrain, construction, and layout a commander can expect in an urban area. For each type of construction, like Type A, Dense, Random Construction, FM 90-10 conducts an analysis of the mobility, fields of fire, obstacles, cover and concealment, fire hazards and command and control encountered in each type of construction. It does not cover at all, however, the tactical or operational value of any of the structures or facilities it describes.

FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas

This manual covers the value of some areas to the task force commander. For example, it discusses the value of public baths, swimming facilities, and cisterns in providing potable water sources in the event conventional or unconventional forces render traditional sources inoperable.

Though this manual states that "urban combat is only combat in different terrain," it goes on to state the importance of a commander understanding the value of tactical or operational targets like power generation or gas production facilities to an opponent, especially in an operation short of war. These types of facilities are prime terrorist or insurgent targets and may have strategic level significance in a small country.

FM 71-3, The Armored and Mechanized Infantry Brigade

This manual does not address terrain analysis relating to MOUT. Additionally, it does not address the operational or tactical value of terrain to the MOUT battalion task force commander.

FM 71-2, The Tank and Mechanized Infantry Battalion Task Force

This manual's restricts its treatment of terrain analysis to non-urban, rural terrain. Furthermore, it does not contain a means to analyze urban terrain for its tactical characteristics or its value as an tactical or operational target.

The test for adequacy for terrain analysis reveals that MOUT doctrine is inadequate. While it gives the commander the ability to do the traditional OCOKA terrain analysis, it does not give the commander the ability to understand key systems within the urban environment and their operational value to the him and the threat. Those systems are utilities, communications, transportation, waste management, civil order, and government.

Technology

This section of the study will reveal the answer to the following question: Does current MOUT doctrine give the MOUT commander the means to employ the weapons technology and use the information systems available to him while countering the technology available to his opponent? This technology covers a broad spectrum of items, ranging from the commonplace Bradley Infantry Fighting Vehicle, to relations with the media in a MOUT operation.

FM 90-10, Military Operations on Urbanized Terrain (MOUT)

FM 90-10 devotes Appendix B to the employment of weapon systems and their potential effects in an urban environment. This section limits the discussion to conventional weapons. Those weapons are the M-16, machineguns, M-203 Grenade Launchers, grenades, flame weapons, and antitank weapons.

This manual briefly examines the use of demolitions in breaching walls. This section gives instruction in the principles of demolitions in urban combat.

This manual dedicates an entire chapter to combat support, including artillery, engineer, aviation, air defense, military police, chemical, and communication assets. This section is very general and does not describe any of the weapon systems or technology available to the commander in MOUT.

FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas

This manual gives extensive coverage to the modern technology available to American commanders and threat commanders in a MOUT situation. It predicts that many third world countries will soon be able to afford technologically advanced systems, previously only available to a few select countries. The manual lists these systems, ranging from precision guided munitions to improved communications capabilities.

FM90-10-1 briefly discusses the value of the global positioning system (GPS) for use in navigating through urban terrain. Though it states that the GPS will likely be effective in a city, it does not outline the various ways a commander might use GPS to gain an advantage over his opponents.

The combat support section of FM 90-10-1 is far more detailed than that of FM 90-10. FM 90-10-1 covers mortars, artillery, naval gunfire, tactical air support, air

defense, Army aviation, military police, and communications in MOUT. This manual gives a detailed description of the urban combat capabilities of each of these systems and goes into much greater detail about the specific systems available to the MOUT commander.

This manual briefly describes how an urban force commander might interface with the media. It does not cover the potential value of favorable relations with the media or, more importantly, the potential harm unfavorable media relations might have on an Army MOUT commander. Moreover, it does not address the effect of almost instant worldwide communications on urban operations.

This manual covers the weapons systems available in MOUT in great detail. These systems include rifles, machineguns of all sizes, grenade launchers, antitank weapons, flame weapons, grenade launchers, demolitions, aerial weapons, tanks and fighting vehicles. It also covers the employment of naval and artillery gunfire. This section of the manual describes the weapon system and its variations, its employment in MOUT, and the potential effects and considerations of using that weapon system in an urban environment.

FM 71-3, The Armored and Mechanized Infantry Brigade

FM 71-3 has a section describing the integration of a heavy force with light infantry and special operations forces. This section details the integration of these units and the systems associated with them, but in very general terms. Additionally, it does not discuss these issues in relation to a MOUT setting.

FM 71-3's Appendix E, Digitization of the Combined Arms Brigade, describes several of the concepts, units, and systems involved in digital warfighting. It outlines in general terms the uses, employment, and capabilities of these systems. Though it

covers several new and emerging technologies. it does not apply them to the urban environment.

FM 71-2, The Tank and Mechanized Infantry Battalion Task Force

In FM 71-2's only discussion of technology, it describes the use. capabilities. and employment of directed energy weapons (DEW). These weapons include lasers. high power microwave weapons. and electronic weapons. It details the employment and effects of these weapons. but not their use in a MOUT environment.

MOUT doctrine gives the commander several firepower-based options on which to develop courses of action. It gives him the ability to use firepower to its fullest extent. The use of firepower and its associated technology has been the basis for Army MOUT doctrine since World War II. The doctrine is inadequate in that it does not give the commander any guidance on the application of non-firepower-based technology to urban combat.

Historical Vignettes

Current Army MOUT doctrine views cities as merely another pieces of terrain. Urban terrain is costly in time. resources, and personnel to attack and defend and should be avoided. If the attacker cannot avoid involvement in MOUT. Army doctrine only provides firepower based solution against a conventional threat. Recent history indicates that urban fighting will become more frequent in the future. The Army will be drawn to city fighting. either by the strategic or operational value of the city. or simply through the urbanization of the world. In any case, the Army will certainly operate more frequently in urban settings in the future. Furthermore, the Army must be prepared to apply both firepower and non-firepower based solutions to urban

fighting. The following vignettes illustrate these points using both ends of the spectrum. The Russians in Grozny arrived prepared to apply a firepower based solution to attacking the city, when a non-firepower based solution would have been far more successful. In the other vignette, the U.S. forces in Somalia, through mission creep, lost the ability to apply a firepower solution when the situation clearly warranted doing so.

Grozny, 1994

The Russian republic of Chechnya was in rebellion against the Moscow government. Moscow's response was to send three invasion columns into Chechnya to stop the rebellion and to keep the republic in the nation. These columns were not the Russians held in awe by American forces during the cold war. They were mostly conscripts, poorly trained and their morale was low. On the other hand, the rebels, though until recently Russians themselves, were well supplied, operating on their home territory and their morale was high.[3] Both sides shared the same training and doctrine. Even though it involves neither the United States Army nor its doctrine, this case provides valuable lessons on MOUT in high intensity conflict.

Since the Russians and Chechnyan rebels began as soldiers in the same army, it follows that they shared a common MOUT doctrine. Like American MOUT doctrine, the Russians favored bypassing built-up areas when possible, leaving them for following second echelon forces. If bypassing was not possible, either because of the value of the area or time, the Russians planned to quickly attack from the march in order to keep the defender from building a credible defensive force. These attacks from the march were difficult to control and often required more freedom of action and training for the urban area commander than the Russian doctrine found

appropriate. If the attack from the march was not possible and the city was still valuable to the effort, the attacker blockaded the urban area, guarded it with a covering force and left it to starve.[4]

The Russians used armor as assault force in MOUT or as a supporting force for the assaulting infantry troops. Additionally, airborne or air assault forces attacked key terrain to seize terrain along avenues of advance or to act as a forward reconnaissance element for the advancing assault force. Russian MOUT doctrine centered around always delivering a high volume of fire. Their doctrine stresses the use of all levels of buildings, from the basement to the top floors, not just the ground floor. In the defense, the Russians stressed a flexible and mobile approach to defending urban areas.

When the Russians attacked the rebels in the Chechnyan capital of Grozny in late 1994, they expected rebel resistance to be weak at best. The Russians began their attack with a erratic, but week long air and artillery strikes that built to a crescendo as they planned to start their assault on New Year's Eve, 1994. Their main objective was the city's railway station. The Russian forces numbered approximately 2,000, while the rebels mustered approximately 5,000 men. The Russian advance began at about 1300, with armor moving along the city's main avenues. The Russians placed heavy and accurate fire along both sides of the streets. The rebels withdrew initially to draw the Russian armor deeper into the city. The Russians planned to conduct a combined arms assault, with the armor supporting the infantry. What resulted was that the infantry waited too long to dismount from the armor, yielding easy targets for rebel gunners firing from above the vehicles.[5]

Like their doctrine states, the Russian assault on Grozny was to begin with an air assault to the center of town and on top of key buildings. The infantry and armor force were to subsequently link up with the air assault force.

The rebel tactics were simple. Allow a vehicle to pass and shoot it in the rear, destroying it and blocking passage for following vehicles. As the occupants evacuated the vehicle, the rebels killed them one by one. The rebels took this technique directly from the Afghans. This was very effective and caused great panic and disorientation in the attacking force. The rebels did not restrict their defense to the confines of the city. They ventured outside the city to attack the Russians follow-on echelons and their artillery stationed outside the city. The Chechnyans also used the limited media available to them to their advantage. Chechnyan television broadcasted live action footage continuously throughout the battle.[6]

The New Year's Eve battle for Grozny was a success for the rebels. They destroyed 20 of 26 tanks, 100 of 120 armored personnel carriers, and caused 500 Russian casualties.

Mission

The Russian seizure of Grozny applied a firepower solution when something less was clearly required. First, the Russians attacked their own people. They could gain nothing by killing hundreds of people in an attempt to reunite the country. This hardened the rebels' resolve and only served to motivate the rebels to fight and further divide the country. Second, the Russians destroyed a large portion of the city during their attack, only to have to rebuild the city after the fighting ended. The Russians were sent to secure the city and did so using firepower alone. They failed to understand the need for a more peaceful solution to this problem, while their doctrine

did not provide a non firepower based solution. As a result, the Russians failed to achieve their goal.

Threat

The Russians have doctrine for MOUT fighting against a conventional threat. In this case, their threat was unconventional in nature. Their lack of doctrine against an unconventional threat contributed to their early losses in this operation.

The Russians failed to understand and appraise their enemy. They should have studied and fully evaluated their threat and refined their intelligence estimates to reflect the rebel's training, disposition, and will to fight. Instead, the Russians assumed their threat would be weak at best. Had the Russians fully understood the nature of their opponent, a solution might have been to fully isolate the rebels and starve them into submission.

Terrain

Since this battle took place on Russian soil, the Russians should have been and were intimately familiar with the terrain and its peculiarities. They conducted a military analysis of the terrain without understanding the implications and values of specific targets within the terrain.

Technology

The battle for Grozny is reinforcement of the fact that technological advantages diminish in urban fighting. The rebels used proven, simple techniques and equipment to defeat a more advanced and better equipped force. The rebels did use available technology to their advantage by establishing a system of command detonated mines

throughout Grozny, controlled by the phone system. For unknown reasons, they never used the mines, but later Russian Spetnaz forces disarmed the system.[7]

The Russians did not synchronize the use of their own technology to overpower the rebels. Though a firepower-based solution was viable, the Russians failed to concentrate their overwhelming combat power to defeat the rebels.

The Russians learned from some of their initial mistakes in their attack on Grozny. They continued the attack and were able to take the city by the end of February 1995. By that time, most of the city was rubbled and 300,000 of the city's 400,000 residents had become refugees.[8]

Mogadishu, 1993

America's involvement in Somalia began as a humanitarian mission and by 1993 had turned, through mission creep, into something far more involved and broader in scope. The event that triggered the famous American battle in the streets of Mogadishu was not over the distribution of meals to starving Somalis, but over the capture by American Task Force Ranger of twenty-four Somali prisoners, two of which were men of fleeing Somali militia leader, Mohamed Farah Aideed.[9] Colonel Sharif Hassan Giumale was the Somali militia leader who orchestrated the Somali attack on the Americans on 3 October 1993. Colonel Guimale ordered Colonel Ali Aden to organize his men and "don't let reinforcements reach the enemy pocket."[10] The pocket to which Colonel Guimale referred was the one the Somalis formed around Task Force Ranger at the building containing the twenty-four prisoners.[11]

Colonel Aden's plan was simple. He organized his men into six squads of six or seven men and had them fade into the throngs of Somalis filling the area near where Task Force Ranger held its captives, preparing them for evacuation. Additionally,

Colonel Aden added a sharpshooter to each of the six squads to make up for the lack of marksmanship of his troops. To conserve ammunition, Colonel Aden reminded his militiamen of the Somali adage, "one man, one bullet."[12] The swarms of Somalis in the area made it very easy for the attacking militiamen to move unnoticed very close to Task Force Ranger without detection. Members of the crowd who could locate weapons joined in the attack. The confusion and escalating action bolstered the confidence of Colonel Aden's militiamen.[13]

Approximately 40 minutes after the attack began and before Colonel Aden's men arrived, other Somali militia forces had already shot down an American helicopter attempting to assist Task Force Ranger. The helicopter crashed about 300 yards east of Task Force Ranger's location. The 10th Mountain Division alerted the Quick Reaction Force in case they needed to assist Task Force Ranger in this situation.[14] Within minutes over 90 Americans arrived by helicopter at the location of the downed helicopter. The Somalis turned this into a kill zone, with small arms and rocket grenade fire.

Lieutenant Colonel Danny McKnight, commander of Task Force Ranger moved his convoy of Somali prisoners to reinforce the helicopter crash site. The Somalis engaged Lieutenant Colonel McKnight's convoy with intense small arms and rocket fire, destroying one of the convoy's trucks. Concerned that the mission would fail if the prisoners were not extracted, Major General William Garrison, commander of the task force, ordered the convoy back to the base at the airfield.

Meanwhile, the Somalis shot down another American helicopter using rocket propelled grenades. The Quick Reaction Force left the airfield to assist the Rangers in securing the crash sites. Colonel Aden's men pinned the Quick Reaction Force down

in an ambush. A third helicopter attempting to deposit forces at the second crash site was hit with a rocket and forced to make a crash landing. All four crew members survived.[15]

By this time, it was dark. The Somalis were successful so far. The Somalis trapped the Americans in the pocket and denied American reinforcements, though the Americans dropped supplies by air into the pocket. To the Somalis' count, they destroyed two American helicopters and damaged three others. General Aideed issued further orders to Colonel Guimale, instructing him to strengthen his positions, continue to prevent any American reinforcement, and, above all, prevent the Americans from escaping. The two Somalis communicated using couriers to keep the Americans from locating them and eavesdropping on their radio conversations. Colonel Guimale considered firing his six 60mm mortars at the trapped Americans in an effort to finalize their destruction. He decided against the mortar attack in order to prevent additional civilian casualties.[16]

Pakistani and Malaysian armor reinforced the 10th Mountain Division's Quick Reaction Force. The convoy of over 70 vehicles departed the airfield to reinforce the Rangers after 2300. Farther north, a company from the Quick Reaction Force battled through several ambushes to link up with Task Force Ranger at about 0100.[17]

Though their casualties were horrible compared to any standard, the Somalis were successful in their attack on the Americans. The 16 hours of fighting in Mogadishu led directly to the American withdrawal from Somalia. The Somalis absorbed over 800 dead and over 300 injured. The Somalis killed 10 and wounded 64 Americans.[18]

Mission

The American force was unprepared for what it faced on 3 and 4 October 1993. The American mission there started as a humanitarian assistance mission and by the time of the battle, was as much a combat operation as Operation Just Cause, Operation Desert Storm or any other recent operation. This lack of preparedness relates directly to the fact that though American forces arrived there to assist in curbing the starvation and suffering in Somalia, their mission expanded well past humanitarian assistance into a near combat footing. The American forces lacked the ability to use a firepower solution to their problem. As a result, Task Force Ranger was unprepared to react to the resistance it met during this battle, and furthermore, because of the humanitarian nature of the original mission, the American forces lacked the firepower, in the form of armor to react to such a situation.

Threat

The American forces did not fully understand the threat in Mogadishu. With the country in chaos, they may not have been able to identify the various factions and clans with power in Somalia. Nonetheless, a complete threat assessment might have assisted the American forces in predicting the reaction of the Somali forces to the American presence and enabled the Americans to formulate a proper response to the threat.

Terrain

The Somalis were extremely familiar with the terrain, since most of the militia members were natives of Mogadishu. In contrast, the American force did not have a

thorough understanding of the Mogadishu terrain or the value of targets and areas within Mogadishu.[19]

Technology

The MOUT battle in Mogadishu reinforces the fact that a small band of determined lightly armed soldiers can control a large area and defeat a larger, more sophisticated force. Additionally, an urban environment, even a relatively underdeveloped one like Mogadishu, reduces a force's technological advantage.

The Somalis were very innovative in attacking the Americans. Their squads melted into the surrounding crowds. This, along with the militia's civilian dress, assured their concealment and allowed them to move to within close range of the Americans. Additionally, it made it very difficult for the Americans to identify them in a crowd and to return fire, for fear of injuring innocent bystanders. The Somalis used a simple plan. Shoot rifles at people and rockets at vehicles and helicopters. The close ranges allowed by the narrow streets of the city and the low-flying helicopters assured the Somalis would hit most of their targets. Finally, the Somalis used runners to negate some of the American technology. If the Somalis had used radios, the Americans could have easily located their command posts.

Summary

This chapter endeavored to present, analyze, and interpret the evidence gained through research. It applied four basic tools to the current doctrine and used two historical vignettes and in an attempt to determine the adequacy of the doctrine when measured against these tools. Like their Soviet style counterpart, American MOUT doctrine provides only firepower based solutions to MOUT missions. The historical

vignettes clearly indicated the need for a force to apply firepower when required, but also to have the ability to recognize the need for and use non-firepower based solutions when needed. The battle for Grozny clearly indicated the consequences of misapplied doctrine. It illustrated how a commander must have the tools to thoroughly evaluate the threat he faces in terms of not only the usually analysis, but what motivates his threat and why the enemy is fighting. The Russian commander used firepower to defeat the rebels when a more peaceful method was required. The Russian commander had no understanding of the systems of the city and how those systems could affect his course of action and how to use them to defeat the rebels. Finally, the Russian commander had the doctrine to enable him to use the available technology, but he failed to do so properly. The Rangers' fight in Mogadishu illustrated that, though the Army lacks the doctrine to conduct many operations other than war in a MOUT setting, the Army must always be prepared to use force as required. This case illustrates, because of the threat's willingness to use civilians for cover and concealment, that the Army must development other than firepower-based means of dealing with threats, while retaining that firepower capability. Mogadishu also portrays what can happen when a commander does not have the tools to understand the threat he faces. If the American commander had understood that the intent of the enemy leader was to simply inflict enough casualties on the American forces to make them leave, the Americans could have reacted more effectively. This chapter also indicated the shortcomings of Army MOUT doctrine in relation to the mission, threat, terrain, and technology model. The next chapter will draw conclusions from this analysis and make recommendations based on those conclusions.

[1]U. S. Army, FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas (Washington: Department of the Army, 1993), 4-28.

[2]U. S. Army, FM 71-3, The Armored and Mechanized Infantry Brigade (Washington: Department of the Army, 1996), 2-3.

[3]Adam Geibel, "Lessons in Urban Combat, Grozny, New Year's Eve, 1994," Infantry Magazine, November-December 1995, 21.

[4]Ibid., 23.

[5]Ibid., 22.

[6]Ibid., 25.

[7]Ibid., 24.

[8]Ibid., 23.

[9]Rick Atkinson, "Night of a Thousand Casualties," The Washington Post, 31 January 1994, A1.

[10]Ibid.

[11]Ibid.

[12]Ibid., A9.

[13]Ibid., A10.

[14]Ibid., A9.

[15]Ibid., A10.

[16]Ibid., A11.

[17]Ibid., A11.

[18]Ibid., A12.

[19]Sean D. Naylor, "The Urban Warfare Challenge," Army Times, 15 April 1996, 13.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter will draw conclusions from the analysis presented in Chapter 4, and make recommendations based on those conclusions. It will answer the primary question, Is the Army's current MOUT doctrine adequate to meet current and future requirements? Additionally, this chapter will explain the significance of these conclusions on MOUT doctrine. Additionally, this chapter will recommend areas worthy of further study revealed through the conduct of this study.

Conclusions

Current Army MOUT doctrine is inadequate to meet current and future requirements. MOUT doctrine is inadequate, unless the current or future requirement involves facing a singular, monolithic Soviet threat in a European environment. Furthermore, the Army does not provide the battalion task force commander, faced with operations in an urban environment, with the doctrinal tools he needs to be successful in a MOUT. Neither of the manuals most closely associated with battalion task force operations, FM 90-10, Military Operations on Urbanized Terrain (MOUT), FM 90-10-1, An Infantryman's Guide to Combat in Built-Up Areas, provides the MOUT commander with the doctrinal tools, tailored to use at his level to conduct anything less than high intensity operations against the Soviets in Europe.

FM 71-3, The Armored and Mechanized Infantry Brigade; and FM 71-2, The Tank and Mechanized Infantry Battalion Task Force give very little coverage to MOUT and in most cases, refer to the above manuals for additional information. This study will examine this inadequacy in relation to the included historical vignettes and the doctrinal analysis.

Doctrinal Analysis

Mission

Army MOUT doctrine gives a battalion task force commander the basic tools to execute a hasty and deliberate attack, and defense of a battle position and strongpoint. To gather these tools, the commander must use a combination of FM 90-10 and 90-10-1. The doctrine only gives limited coverage to missions related to MOOTW. FM 90-10-1 assists the commander in its section covering MOUT under restrictive conditions.

Threat

Though MOUT doctrine gives the commander the basic tools to understand his threat, the task force commander must turn to other publications to get information related to the range of threats he might face in an urban operation. MOUT doctrine listed in the manuals this study examines either stresses facing a singular Soviet threat or lightly discusses facing unconventional opponents like guerillas or insurgents. FM 90-10-1 gives the most extensive treatment of unconventional threats, but fails to give enough information to determine probable courses of action by this type of threat. Additionally, MOUT doctrine does not give

the MOUT commander the ability to understand and counter unconventional threats in an urban setting.

Terrain

Army doctrine gives the commander several good tools to use in terrain analysis. With FM 90-10 and 90-10-1, he can gain an understanding of types of construction and the general layout of most types of cities. The problem with FM 90-10's coverage is its restriction to Europe in its analysis. Though FM 90-10-1 give some coverage to different types of MOUT terrain and their significance to commander in tactical or operational value, there is no repository of information that summarizes the tactical and operational value of different terrain in MOUT. The commander must intuitively understand the significance of terrain like power and television stations, water purification facilities and power generation facilities.

FM 90-10 extensively covers urban terrain analysis. It gives an indepth description of the types of construction a unit is likely to encounter in MOUT and a description of the different layouts of urban environments. The manual restricts its discussion to a European environment. FM 90-10-1 gives the reader some discussion of the political, social, and economic value of terrain, but the treatment is too short and shallow. Neither FM 71-3 nor FM 71-2 cover urban terrain analysis at all.

None of the manuals gives the commander the ability to understand the systems of the city and their impact on his and his enemy's operations. Utilities, communications, transportation, waste management, civil order, and government are all systems that the MOUT commander must understand in order to be successful.

Technology

None of the Army's current MOUT doctrine explains the use of modern technology in MOUT except for weapon systems. FM 90-10-1 is the only manual that mentions the use of technology other than weapon systems, in its explanation of the use of GPS in an urban setting. Furthermore, this manual gives the most detailed and modern description of the weapon systems available to the MOUT commander.

The MOUT commander has no doctrinal resource from which he can draw guidance on non-firepower-based solutions to MOUT problems. The commander must, instead, rely on lessons learned and improvise in order to solve problems that do not allow for the use of a firepower solution.

Historical Vignettes

Both historical vignettes allow conclusions relating to the adequacy of American MOUT doctrine. A commander must have the ability and doctrine to use non-firepower based solutions to MOUT problems. At the same time, the commander must have the ability to apply overwhelming firepower when required. Both cases revealed that the technological advantage an adversary's reduces or loses his advantage in urban combat. An opponent can defeat the latest technology, given the right conditions.

The MOUT commander must have a means to understand the nature of his threat. This understanding includes how the opponent fights and the social, political, cultural, and psychological components of the threat. Each vignette revealed a failure of the Russian or American commanders to understand the tenacity with which their opponents would fight. This tenacity relates directly to the social, political, cultural, and psychological makeup of the enemy.

The Grozny vignette reminded us that a force must have other means to operate in an urban setting than a firepower based solution.

Understanding terrain and the value of various facilities is key in urban combat. The Somalis had a great understanding of the terrain simply because they were native to it, but they also understood the tactical and operational value of components and facilities. Conversely, the Americans failed to understand the value of the terrain and were unable to use it to their advantage.

Recommendations

Publications

FM 90-10

The Army must update FM 90-10 to reflect current threats, terrain, and technology. The new manual must retain the ability to outline high intensity conflict while giving the commander the ability to operate in OOTW. It must broaden its description of potential threats to cover more unconventional threats. It must enable the commander to analyze urban terrain using the systems available in the city, like utilities, communications, transportation and governement. Finally, the new manual must give the commander the ability to use non firepower based technology to his advantage.

The Army must retain the ability to fight the nation's battles, regardless of the current requirements or missions other than war that the country asks the Army to perform. Therefore, FM 90-10 must continue to provide the Army with a firepower-based MOUT doctrine. It must outline high intensity conflict in MOUT and how the Army will conduct those types of operations. Additionally, Army MOUT doctrine

must address OOTW in MOUT. FM 90-10 is the vehicle for establishing this doctrine.

FM 90-10 uses an effective format, which the manual should retain. It describes the operations, how the enemy is likely to fight, and describes the operations at different levels. This allows the reader to understand how units at different levels conduct this operation.

The Army must remove two items from FM 90-10. Though the Army must prepare to face a large, conventional MOUT threat in a mid to high intensity conflict, the Army should delete FM 90-10's reference to the Soviet threat and replace those references with a broader threat scope. That scope should include, at a minimum, references to middle eastern or far eastern countries, with representation of expected climatic, geographical, and architectural differences. Additionally, FM 90-10 must remove the reliance on a purely European setting and broaden the scope of terrain analysis to include the entire world and its range of possible terrains.

FM 90-10 must add three areas in its new form. Those areas are the peculiarities to MOUT in OOTW, the range of potential goals and objectives of potential threats, and establish doctrine for the range of operations a unit might conduct in an urban setting. The commander must know how to employ the latest technology in MOUT. FM 90-10 must explain, like it does for various weapon systems, the use of cellular communications, computers, telephone, television, and radio systems, and other forms of modern technology in an urban setting. It must explain to the commander, how different facilities and objectives affect the conduct of operations and their tactical and operational value. These facilities include water and sewage treatment plants, electrical facilities, communications systems, and

transit systems. Finally, FM 90-10 must establish doctrinal principles for the conduct of operations other than war in MOUT. These missions include combatting terrorism, disaster relief, nation assistance, support to counterinsurgency, peace operations, show of force, support to civil authorities, and support to counterdrug operations. The Army currently conducts each of these operations must have a MOUT doctrine for executing these missions in an urban setting.

FM 90-10-1

FM 90-10-1 is an excellent how-to manual and the Army should make minor changes to its current format. First, it should contain a treatment of the conduct of tasks associated with operations other than war, like non-violent crowd control, patrolling, and other operations in situations that are likely to have restrictive rules of engagement. Next, the manual should include the latest technology, like the Javelin.

71 Series of Field Manuals

These manuals, specifically FMs 71-2 and 3, should expand to include the operations other than war missions a battalion or brigade might execute, in both urban and rural settings. Additionally, these manuals should continue to refer to FMs 90-10 and 90-10-1 as the source for MOUT doctrine.

Suggestions for Further Research

This study examined a relatively narrow portion of the Army training and doctrine associated with MOUT. This section of the study will outline the several pertinent areas associated with MOUT doctrine revealed through the author's research that require further in-depth research.

FMs 90-10 90-10-1 only address maneuver warfare, and then some of the key components like the use of aviation are omitted. As a result, the Armor and Infantry branches are the only branches with written MOUT doctrine. The Army should study the need for the development of MOUT doctrine for other branches and how that doctrine should relate to both combat operations and OOTW.

Non lethal weapons are now widely available for use by the Army in a range of operations. Non lethal weapons, like crowd controlling foam have a great potential for use in crowd control. As the Army conducts more OOTW, the need for non lethal means of engagement will increase in all types of operations, not just MOUT. The Army should study the variety of non lethal weapons available for use and decide which of those are potentially beneficial for use in an urban environment. After this selection, the Army should formalize their use by establishing written doctrine on their employment in urban environments.

Because units conduct MOUT training on a specific type of terrain, most Army installations with MOUT sites spend a great deal of resources in building and maintaining these MOUT sites. MOUT sites are also very popular for training and scheduling is competitive. With MOUT site cost and popularity, along with the idea that operations in urban settings will face almost every unit deployed in the future, the Army should study the effectiveness of how we train to conduct MOUT. This study should include how platoons, companies, and battalions do MOUT training. The study should address the available training publications associated with MOUT like Mission Training Plans (MTPs). It should also examine the effectiveness of how we conduct rifle marksmanship training on MOUT operations.

The Army fielded several new weapon systems and changed several existing weapons since the publication of the current FM 90-10. These weapons range from entire systems like the Mark 19 to the changes to the M-16 rifle to the use of precision guided munitions. The Army should study the value of the use of these weapons in MOUT. Subsequently, the Army should establish written doctrine, or changes to existing doctrine to reflect the new or changed weapons systems.

Summary

The Army's current MOUT doctrine is inadequate to meet current and future requirements. The Army has firepower based doctrine, when recent operations indicate OOTW operations do not allow the application of firepower to succeed. Furthermore, our doctrine does not allow the MOUT commander to effectively evaluate his potential threat, understand the urban environment's systems, or use non firepower based technology effectively. Major Ralph Peters says, "we will not be able to avoid urban deployments short of war and even full-scale city combat. . . A military unprepared for urban operations across a broad spectrum is unprepared for tomorrow.[1] Our current MOUT doctrine is dated, referring to a singular Soviet threat in Europe when our forces are fighting factions in Somalia. Our doctrine does not address the range of missions a unit is likely to execute, nor does it provide our commanders with the tools to evaluate his urban threat. It does not help the commander evaluate the urban terrain before him to identify its facilities tactical or operational value, and it does not give the commander the tools he needs to successfully employ all of the technology available to him over the range of conflict. The Army must establish tools and doctrine for these shortcomings and integrate

them into FMs 90-10 and 90-10-1. Finally, again in the words of Major Peters, "We must begin judicious restructuring for urban combat in order to gain both efficiency and effectiveness-as well as to preserve the lives of our soldiers."[2]

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[1]Ralph Peters, "Our Soldiers, Their Cities," Parameters 361 (Spring 96): 43.

[2]Ibid., 50.

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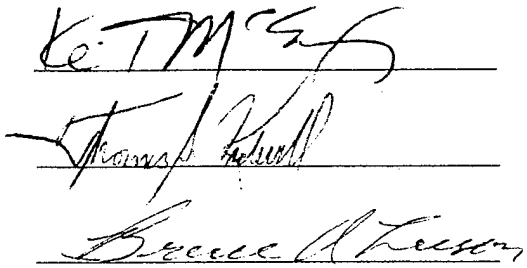

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